

Agenda of July 27, 2005

Item No. _____

Contract No. DWS-844A

Change Order No. 1

Price Increase: \$3,210,004.58 (NTE)

Time Extension: 90 Days

TO: The Honorable Board of Water Commissioners
City of Detroit, Michigan

FROM: (b)(6), (b)(7)(C) Director
Water and Sewerage Department

DATE: July 27, 2005

RE: Contract No. DWS-844A
"Electronic Security Systems Upgrade at Various DWSD Facilities"
DFT Security Team

I. Motion:

Upon the recommendation of Gary Fujita, Deputy Director, the Board of Water Commissioners authorizes the Director to **grant an increase, not to exceed \$3,210,004.58 in the Contract Price, with a time extension of ninety (90) calendar days to the Substantial Completion Date with no time extension to the Final Completion Date, for DWSD Contract No. DWS-844A, Change Order No. 1, "Electronic Security Systems Upgrade at Various DWSD Facilities", DFT Security Team** and also authorizes the Director to take such other action as maybe necessary to accomplish the intent of this vote.

II. Justification:

The Detroit Water and Sewerage Department (DWSD) Contract No. DWS-844A: Electronic Security Systems Upgrade at Various DWSD Facilities, was awarded to the DFT Security Team. The Start Work Order was issued on October 9, 2004 and the Substantial Completion Date is currently scheduled on October 8, 2005.

Since the September 11, 2001 terrorist attacks, security at water treatment plants throughout the country has become a top national priority. To further safeguard our plant personnel, water supply and chlorine facilities, DWSD's Security Division has requested that we provide perimeter security systems at the five (5) existing Water Treatment Plants (WTP's) and Belle Isle Intake as advised by the Interim Voluntary Security Guidance for Water Utilities dated December 9, 2004.

Board of Water Commissioners

(DATE)

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RE: Contract No. DWS-844A

"Electronic Security Systems Upgrade at Various DWSD Facilities"

To expedite this work, it is recommended that this change be incorporated into the DWS-844A, Design/Build Contract, work as Change Order No. 1. DWSD has reviewed the detailed cost breakdown for the proposed perimeter security systems submitted by the DFT Security Team and found it acceptable. The duration for design and implementation of these systems at all five sites and the intake is one hundred sixty-three days with a resultant ninety day extension to the Contract.

The Substantial Completion Date of Contract DWS-844A is October 8, 2005. An additional ninety (90) calendar days is requested by the Contractor to complete the perimeter security work. The revised Substantial Completion Date is January 7, 2006, and the original Final Completion Date will remain on October 8, 2007. The total cost of Change Order No. 1 is \$3,210,004.58.

III. Project Task/Costs:

A.	Original Contract Price:	\$ 21,283,850.00
	Change Order No. 1	\$ 3,210,004.58
	Total	\$ 24,493,854.58
B.	Time Extension	90 Calendar Days

IV. Management Status:

A.	Start Work Date:	October 9, 2004
B.	Original Substantial Completion Date:	October 8, 2005
	Original Final Completion Date:	October 8, 2007
C.	Revised Substantial Completion Date:	January 7, 2006
	(Original Final Completion Date will remain)	
D.	Original Contract Amount:	\$ 21,283,850.00
E.	Change Order No. 1:	\$ 3,210,004.58
G.	Revised Contract Amount:	\$ 24,493,854.58

This recommendation was considered by the Board of Water Commissioners and action taken as noted below:

BOARD OF WATER COMMISSIONERS:

ACTION: _____

DATE: _____

BY: _____

(b)(6), (b) (7)(C) **Director**

(b)(6), (b) (7)(C) bcc: (b)(6), (b) (7)(C) Suspense File

BACKGROUND

The perimeter security systems proposed for installation at the WTP's and the intake were not included in Contract No. DWS-844A or under the recently completed Contract No. M-343 because monitoring by cameras by the manned guard stations was considered adequate at that time. The security systems being installed under DWS-844A provides new security upgrades including a perimeter security system only at the unmanned remote water pumping stations and the Central Services Facility (CSF). The existing security systems installed under M-343 consist of security access control systems, cameras and building security at the WTP's and the Belle Isle Intake. In the Interim Voluntary Security Guidance for Water Utilities dated December 9, 2004, water utilities are advised to consider a fence detection system for water treatment facilities. The Security Division has requested the addition of a perimeter detection security system at the water treatment plants as soon as possible.

Original Scope of Contract No. DWS-844A:

The electronic security systems being installed under this Contract are described below:

Water Booster Stations and Central Services Facility (CSF) - Motion detectors, door/window contacts, fixed and movable cameras, onsite digital video recording systems, replacement perimeter fencing including gates and electric operators, perimeter intrusion sensors, and electronic networking equipment are provided.

Sanitary Lift Stations - Motion detectors, door/window contacts, movable cameras, onsite digital video recording systems, replacement gates and electric operators, perimeter intrusion sensors, and electronic networking equipment are provided.

CSO Basins and Water Treatment Facilities - The existing electronic security systems will be integrated into the new SBC OPT-EMAN communication network, the city-wide standard for Detroit approved by the City Council.

Scope of Contract M-343:

The electronic security systems installed under Contract No. M-343 are described below:

Water Treatment Plants - Site Entrance and building card access system and site cameras were installed. Building security consisting of door contacts, cameras with video recording, and motion detectors was also provided.

Belle Isle Intake - A card access system, door contacts and motion detectors were installed for the Intake Structure. A site camera with video recording was also provided.

Benefits of a Perimeter Detection System

Each of our WTP's covers several acres with several thousand feet of perimeter fence lines. Intruders need to be detected as soon as they try to enter our plants so security personnel can take appropriate action to protect our plant personnel and safeguard our water supply and chlorine facilities. An intrusion detection system at our fence lines will provide early detection. The perimeter detection system will supplement the intrusion detection system at the WTP's provided under Contract No. M-343.

Description and Scope of the (Proposed Change Order No. 1) Perimeter Detection System

The perimeter intrusion system consists of special sensor cable mounted on the entire fenceline of each water treatment plant. When an intruder climbs the fence into the plant, the sensors will detect the intruder and an alarm will be sent to the guardhouse at the plant. The alarm will also be sent to the Security Room at the Main Office Building located downtown. The work under this Change Order also includes warning signs at each facility and extensive fence repairs and replacements for proper operation of the fence sensors. The perimeter detection alarms will be integrated into the existing M-343 security system.

Change Order Process

Since time is of the essence, a Design/Build proposal was requested from the DWS-844A Contractor (DFT Security Team) to provide the perimeter security system. If a new project is designed and routinely advertised, it is estimated that the proposed system would be installed in two (2) years. If incorporated as a change order to the DWS-844A Contract, it is estimated that the perimeter security system would be installed by December 2005.

There are several cost savings to having DFT perform the work under a change order. Detroit Contracting, Inc. (a member of the DFT joint venture) had installed the original M-343 system and is in the best position for integrating the two systems with cost savings associated with software, hardware, and coordination. In addition, there are significant cost savings since DFT is already mobilized for the overall security system work.

The proposal was reviewed by DWSD from a technical viewpoint and cost basis and was found to be reasonable. DFT and its proposed subcontractors have the proven experience, ability and resources to complete the perimeter detection system installations at all five (5) WTP's and the Belle Isle Intake.

The cost breakdown for the change order is provided in the attached Quotation by the DFT Security Team.

DFT SECURITY TEAM QUOTATION

<u>Item</u>		<u>Cost</u>
Design Services		\$212,500.00
Management & Ancillary Services		\$472,504.30
<u>Lake Huron Plant</u>		
Electrical & Associated Civil Work	\$255,700.50	
Fence and Site Work	\$244,600.50	
	Subtotal	\$500,300.50
<u>Northeast Plant</u>		
Electrical & Associated Civil Work	\$211,672.00	
Fence and Site Work	\$223,100.00	
	Subtotal	\$434,772.00
<u>Water Works Park & Belle Intake Intake</u>		
Electrical & Associated Civil Work	\$247,100.00	
Fence and Site Work	\$252,700.00	
	Subtotal	\$499,800.00
<u>Southwest Plant</u>		
Electrical & Associated Civil Work	\$214,984.00	
Fence and Site Work	\$212,355.00	
	Subtotal	\$427,339.00
<u>Springwells Plant</u>		
Electrical & Associated Civil Work	\$226,600.00	
Fence and Site Work	\$181,400.00	
	Subtotal	\$408,000.00
Warranty		<u>\$ 49,000.00</u>
	Total:	\$3, 004,215.80
Bond/Insurance -----		\$ 55,577.99
Contractor's fee @ 5% -----		<u>\$150,210.79</u>
	TOTAL	\$3,210,004.58